

Dept. Bacteriology

September 12, 1957

Dear Prof. Haldane:

+July5 Your note of July 23 just received. I strongly suspect that you will have had a copy of my earlier letter addressed to you in Calcutta, but here is the basic information on our travel plans.

We will be here in Melbourne to the end of October & are bound to stay in Australia at least to Nov. 2, depending on a number of circumstances, including finances, current state of the research problems here, and the urgency of various items of university business at home. We have to choose whether to return directly, trans-Pacific, or via India and Europe. On the latter plan, we might be able to visit you + Bombay between about November 5 - 15, more or less. Although we will be obliged to come to a decision within the month, to allow time for bookings and visas, we have not yet been able to approach it.

The incremental cost, over our present Chicago-Sydney return passage, of routing through Calcutta, comes to \$300 each. I had hoped to nibble into this somewhat by incorporating some travel to Adelaide or Perth into the westward trip, but it does not appear that such stopover privileges are available here as they are in Europe. I am still investigating. I have seen some reference, however, to a special India-Britain rate for tickets purchased in India, and this might conceivably be available to some advantage. There might also be some currency problem of applying Indian funds to supplement our ticket, but you surely would find that the least difficulty.

I fully appreciate the unlikelihood of pulling this off at such short notice & much doubt whether it would ~~warrant~~ warrant much trouble on your part. Your interest is much appreciated nevertheless. Meanwhile, we will try to come to some sort of decision about what we should do, and see what we can do to make up the dollar gap in other ways.

oOo

indeed

I did see Harris-- he came over with Cummins and Mrs. Work one evening at Ciba House to talk about bacterial cell walls, in which I've been interested lately in connection with penicillin, protoplasts and L-forms. It was rather curious that our interests should have coincided at two widely separated points of study.

Here in Melbourne, I've been learning a great deal of

within each of which, no recombination has been observed. However, since crosses of virulent x avirulent strains have given a wide dispersion of virulence ('redistribution') Burnet had been thinking that a rather different genetic mechanism controlled virulence. I am still inclined myself to a traditional polygenic interpretation of virulence, the lack of recombination within each 'linkage group' signifying that the 'group' in fact represents the pleiotropic manifestation of a single locus. This is not altogether implausible on other evidence, and Burnet at present would make no choice between 'floating virulence genes' and polygenes at fixed loci. There are some experiments that could help decide, viz. intercrossing recombinants of the same degree of virulence to look for a further 'redistribution' in the F2; these might be technically difficult, and it would help a great deal to have more independent markers. My other instant concern is the rather vexing problem of 'incomplete virus'. Having worked on this about 3 days, I am not embarrassed by too many facts, but I am reaching the inference that this is not a genetic problem at all, but rather that host cells whose own surface has been altered by exposure to excess virus or to receptor-destroying-enzyme yield virus whose skins are likewise imperfect, viz. that this is 'incomplete virus' perhaps by virtue of consequent damage to the nucleic acid content.

With best regards

Joshua Lederberg

CONTINUATION

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